Data Suppression and Limitation

Acronyms
ABR - Adolescent birth rate
CI - Confidence interval
CSV - Comma-separated values
MSSA – Medical Service Study Area
PRB - Percentage of repeat birth
RSE - Relative Standard Error
PBHP - Percentage of birth in a high poverty area

This report uses data suppression rules to ensure the reliability of data and protect the privacy of adolescent mothers. The cutoff for adolescent birth rate (ABR) denominator is 50 females aged 15-19; birth counts and rates were suppressed if the denominator is below cutoff and if the numerator (number of live births) is between 1 and 5 or if the calculated relative standard error (RSE) is greater than or equal to 50%. The cutoff for the percentage of repeat birth (PRB) and percentage of birth in a high poverty area (PBHP) denominator is 20 births aged 15-19; birth counts and percentages were suppressed if the denominator is below cutoff or if the numerator is between 1 and 5 or if the calculated RSE is greater than or equal to 50%. PBHP was suppressed if the value is 100%. See ftp://ftp.cdc.gov/pub/health_statistics/nchs/Dataset_Documentation/DVS/natality/UserGuide2012.pdf for more information on the National Center for Health Statistics guidance on computations of rates and percentages and http://www.doh.wa.gov/Portals/1/Documents/5500/SmallNumbers.pdf for Guidelines for Working with Small Numbers.

Two statistical measures – 95 percent confidence intervals (CI) and RSE – were used to demonstrate the reliability of the results presented in this report. The CI is an estimate around ABR, PRB and PBHP indicating the reliability of these indicators and can be interpreted as the range of values that would contain the true value 95% of the time. The RSE is an estimate indicating whether the ABR, PRB and PBHP meets standards of reliability or precision and is defined as the ratio of the standard error of the estimate divided by the estimate and multiplied by 100.

In the downloadable CSV data file, the indicator rate is shown with their corresponding CIs ; records are annotated as “unstable due to small numbers when the RSE is between 30-49 percent; the data are suppressed when the RSE is equal to or greater than 50 percent or the denominator and numerator did not meet standards for reliability. PBHP data for MSSA with a value of 100 percent were suppressed.

The data presented in this report have limitations. The method used in estimating the MSSA population assumed that population changes (due to migration and mortality) were distributed

equally across all MSSAs (within each county) among all females aged 15-19, during the years 2010 through 2012. A small number (n=3471) of births to women in the "other" race category was not separately estimated by MSSA, because the population of the "other" race category was allocated only at the county level through the Census Modified Race Summary File. Comparing these data with the previous report using data from 2001-2002 and 2004-2005 is not advisable due to differences in methodology and population data sources.